

## Chapter 3 The Biosphere

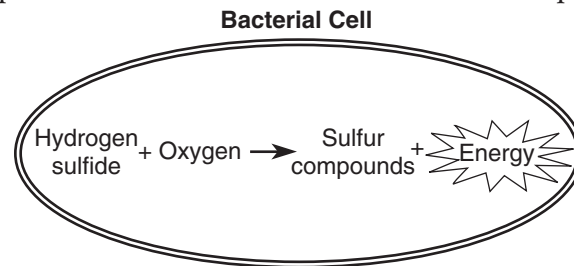
## Chapter Vocabulary Review

**Short Answer** On the lines provided, define the following terms.

1. ecology \_\_\_\_\_  
\_\_\_\_\_
2. biosphere \_\_\_\_\_  
\_\_\_\_\_
3. species \_\_\_\_\_  
\_\_\_\_\_
4. community \_\_\_\_\_  
\_\_\_\_\_
5. biome \_\_\_\_\_  
\_\_\_\_\_
6. autotroph \_\_\_\_\_  
\_\_\_\_\_

**Multiple Choice** On the lines provided, write the letter of the phrase or term that best answers each question.

- \_\_\_\_\_ 7. What are the products of photosynthesis?  
a. water and energy                      c. water and sugars  
b. carbon dioxide and carbohydrates    d. oxygen and carbohydrates
- \_\_\_\_\_ 8. What process does the illustration below show?  
a. photosynthesis                          c. chemosynthesis  
b. evaporation                              d. transpiration



- \_\_\_\_\_ 9. Which of the following types of organisms obtain energy by eating only plants?  
a. producers                                  c. omnivores  
b. herbivores                                  d. carnivores
- \_\_\_\_\_ 10. Which of the following types of heterotrophs eat other animals?  
a. omnivores and carnivores              c. carnivores only  
b. herbivores and omnivores              d. carnivores and herbivores

- \_\_\_\_\_ 11. What are organisms that feed on plant and animal remains and other dead matter called?  
 a. decomposers c. detritivores  
 b. omnivores d. herbivores
- \_\_\_\_\_ 12. Which of the following types of heterotrophs would bacteria and fungi be classified as?  
 a. detritivores c. carnivores  
 b. herbivores d. decomposers
- \_\_\_\_\_ 13. What is the one-way flow of energy in an ecosystem called?  
 a. a food chain c. a food web  
 b. an energy pyramid d. a biomass pyramid
- \_\_\_\_\_ 14. What links all the food chains in an ecosystem together?  
 a. trophic levels c. a food web  
 b. an energy pyramid d. a biomass pyramid
- \_\_\_\_\_ 15. What is each step in a food chain or food web called?  
 a. a trophic level c. an ecological pyramid  
 b. a biomass d. a limiting level
- \_\_\_\_\_ 16. What pyramid represents the amount of energy or matter that exists in each level of a food web?  
 a. a food pyramid c. an ecosystem pyramid  
 b. an ecological pyramid d. a food web pyramid
- \_\_\_\_\_ 17. What is the total amount of living tissue within a given trophic level called?  
 a. biomass c. biome  
 b. limiting nutrient d. nutrient

**Completion** *On the lines provided, complete the following sentences.*

18. Molecules are passed around again and again within the biosphere in \_\_\_\_\_ cycles.
19. The process by which water changes from liquid form to an atmospheric gas is called \_\_\_\_\_.
20. During \_\_\_\_\_, water enters the atmosphere by evaporating from the leaves of plants.
21. A chemical substance that an organism requires to live is called a(an) \_\_\_\_\_.
22. The conversion of atmospheric nitrogen into ammonia is a process called \_\_\_\_\_.
23. The conversion of nitrates into nitrogen gas is called \_\_\_\_\_.
24. The rate at which organic matter is created by producers or consumers is called \_\_\_\_\_.
25. A nutrient that is scarce or cycles slowly through an ecosystem is called a(an) \_\_\_\_\_.